

# (12) United States Patent

Carroll

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## (54) SPORTS SHOE CLEATS

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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## Related U.S. Application Data

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(51)	Int. Cl. <sup>7</sup>		A43B 5/00
(52)	U.S. Cl.	36/134; 36/67	R; 36/67 D

## (56) References Cited

#### U.S. PATENT DOCUMENTS

39,575 A	8/1863	Hyatt et al.
180,578 A	8/1876	Gunsalus
416,861 A	12/1889	Scafe
485,459 A	11/1892	Crocker
962,719 A	6/1910	Pratt
1,093,358 A	4/1914	Schroeder
1,243,209 A	10/1917	Park
1,304,616 A	5/1919	Smith

(List continued on next page.)

### FOREIGN PATENT DOCUMENTS

CA	2074286	1/1994
DE	185659	9/1905

DE	25 29 027	1/1977
DE	25 40 426	3/1977
DE	34 38 060	6/1985
DE	3811513	• 10/1989
EP	342232	11/1989
EP	0 524 861 A1	1/1993
FR	493748	12/1918
FR	807754	1/1937
FR	91 09475	1/1993
GB	6877	4/1895
GB	2814	2/1914
GB	1378461	12/1974
GB	1434282	5/1976
GB	2223394	4/1990
GB	2248762	4/1992
T	467815	12/1951
IP	B5-914 A	5/1989
ΙP	762928	5/1989
wo	WO 89/01302	2/1989
wo	WO 91/03960	4/1991

#### OTHER PUBLICATIONS

"A Unique Holiday Offer", Softspikes, Golf Digest Dec. 1996, p. 149.\*

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57) ABSTRACT

A golf shoe cleat has a main body member having a dome-shaped outer face and a planar inner face, a threaded stud molded integrally with the main body member and projecting outwardly from the inner face. A plurality of pseudo pyramid-shaped teeth projecting around the perimeter of the main body member, each of the pseudo pyramidshaped teeth having an outward angle to provide lateral stability and traction through the plane of a sports swing. The traction teeth have a low profile to reduce damage to putting green surfaces for example. An anti-debris ring is formed on the peripheral edge of the planar inner face. In this position, the anti-debris ring tends to prevent the edge of the cleat from separating from the sole of the golf shoe thereby foreclosing the entry of debris underneath the cleat. At the same time, when the cleat is snugged down by the application tool, the pressure causes the ring to more closely hug the sole and precludes the entry of debris.

## 11 Claims, 4 Drawing Sheets

